

AMENDMENTS TO THE CLAIMS

1. (Previously Presented) An isolated nucleic acid molecule encoding an acquired resistance polypeptide comprising an ankyrin repeat, wherein said acquired resistance polypeptide confers, on a plant expressing said polypeptide, resistance to a plant pathogen.

2. (Previously Presented) The isolated nucleic acid molecule of claim 1, wherein said polypeptide activates the expression of a pathogenesis-related polypeptide.

3. (Cancelled)

4. (Previously Presented) The isolated nucleic acid molecule of claim 1, wherein said isolated nucleic acid molecule is derived from an angiosperm.

5. (Original) The isolated nucleic acid molecule of claim 4, wherein said angiosperm is a member of the *Solanaceae*.

6. (Original) The isolated nucleic acid molecule of claim 4, wherein said angiosperm is a member of the *Cruciferae*.

7. (Original) The isolated nucleic acid molecule of claim 1, wherein said nucleic acid molecule is genomic DNA.

8. (Original) The isolated nucleic acid molecule of claim 1, wherein said nucleic acid molecule is cDNA.

9. (Original) The isolated nucleic acid molecule of claim 1, wherein said plant pathogen is a bacterium, virus, viroid, fungus, nematode, or insect.

10. (Previously Presented) An isolated nucleic acid molecule that hybridizes to a nucleic acid molecule comprising the genomic nucleic acid sequence of Fig. 4 (SEQ ID NO:1), wherein said isolated nucleic acid molecule encodes an acquired resistance polypeptide comprising an ankyrin repeat that confers, on a plant expressing said polypeptide, resistance to a plant pathogen.

11. (Previously Presented) An isolated nucleic acid molecule that hybridizes to a nucleic acid molecule comprising the cDNA of Fig. 5 (SEQ ID NO:2), wherein said isolated nucleic acid molecule encodes an acquired resistance polypeptide comprising an ankyrin repeat that confers, on a plant expressing said polypeptide, resistance to a plant pathogen.

12. (Previously Presented) An isolated nucleic acid molecule that hybridizes to a nucleic acid molecule comprising the DNA sequence of Fig. 7A (SEQ ID NO:13), wherein said isolated nucleic acid molecule encodes an acquired resistance polypeptide comprising an ankyrin repeat that confers, on a plant expressing said polypeptide, resistance to a plant pathogen.

13. (Previously Presented) The isolated nucleic acid molecule of any one of claims 10-12, wherein said nucleic acid molecule encodes a polypeptide that activates the expression of a pathogenesis-related polypeptide.

14. (Cancelled)

15. (Previously Presented) The isolated nucleic acid molecule of any one of claims 1 or 10-12, wherein said nucleic acid molecule is operably linked to an expression control region.

16. (Previously Presented) A vector comprising the nucleic acid molecule of any one of claims 1 or 10-12, said vector directing expression of the polypeptide encoded by said nucleic acid molecule.

17. (Previously Presented) A transgenic cell comprising (i) an isolated nucleic acid molecule encoding an acquired resistance polypeptide comprising an ankyrin repeat, (ii) an isolated nucleic acid molecule that hybridizes to a nucleic acid molecule comprising the genomic nucleic acid sequence of Fig. 4 (SEQ ID NO:1), (iii) an isolated nucleic acid molecule that hybridizes to a nucleic acid molecule comprising the cDNA of Fig. 5 (SEQ ID NO:2), (iv) an isolated nucleic acid molecule that hybridizes to a nucleic acid molecule comprising the DNA sequence of Fig. 7A (SEQ ID NO:13), or (v) a vector comprising said nucleic acid molecule and directing expression of the polypeptide encoded by said nucleic acid molecule; wherein said acquired resistance polypeptide confers, on a plant expressing said polypeptide, resistance to a plant pathogen.

18. (Previously Presented) The transgenic cell of claim 17, wherein said transgenic cell is a plant cell.

19. (Previously Presented) The transgenic cell of claim 17, wherein said transgenic cell is a bacterial cell.

20. (Previously Presented) The transgenic cell of claim 19, wherein said transgenic bacterial cell is *Agrobacterium*.

21. (Previously Presented) The transgenic cell of claim 18, wherein said transgenic plant cell has increased resistance to a plant pathogen.

22. (Previously Presented) A transgenic plant comprising (i) an isolated nucleic acid molecule encoding an acquired resistance polypeptide comprising an ankyrin repeat, (ii) an isolated nucleic acid molecule that hybridizes to a nucleic acid molecule comprising the genomic nucleic acid sequence of Fig. 4 (SEQ ID NO:1), (iii) an isolated nucleic acid molecule that hybridizes to a nucleic acid molecule comprising the cDNA of Fig. 5 (SEQ ID NO:2), (iv) an isolated nucleic acid molecule that hybridizes to a nucleic acid molecule comprising the DNA sequence of Fig. 7A (SEQ ID NO:13), or (v) a vector comprising said nucleic acid molecule and directing expression of the polypeptide encoded by said nucleic acid molecule; wherein said acquired resistance polypeptide confers, on a plant expressing said polypeptide, resistance to a plant pathogen; and wherein said nucleic acid molecule or said vector is expressed in said transgenic plant.

23. (Previously Presented) The transgenic plant of claim 22, wherein said transgenic plant is a transgenic angiosperm.

24. (Previously Presented) The transgenic plant of claim 23, wherein said transgenic angiosperm is a dicot.

25. (Original) The transgenic plant of claim 24, wherein said dicot is a cruciferous plant.

26. (Original) The transgenic plant of claim 24, wherein said dicot is a solanaceous plant.

27. (Original) The transgenic plant of claim 23, wherein said transgenic angiosperm is a monocot.

28. (Currently Amended) A seed produced from the plant of claim 22, wherein the cells of said seed comprises (i) an isolated nucleic acid molecule encoding an acquired resistance polypeptide comprising an ankyrin repeat, (ii) an isolated nucleic acid molecule that hybridizes to a nucleic acid molecule comprising the genomic nucleic acid sequence of Fig. 4 (SEQ ID NO:1), (iii) an isolated nucleic acid molecule that hybridizes to a nucleic acid molecule comprising the cDNA of Fig. 5 (SEQ ID NO:2), or (iv) an isolated nucleic acid molecule that hybridizes to a nucleic acid molecule comprising the DNA sequence of Fig. 7A (SEQ ID NO:13).

29. (Previously Presented) A cell from the transgenic plant of claim 22.

30 - 35 (Cancelled)

36. (Previously Presented) A method of producing an acquired resistance polypeptide, said method comprising the steps of:

(a) providing a cell transformed (i) an isolated nucleic acid molecule encoding an acquired resistance polypeptide comprising an ankyrin repeat, (ii) an isolated nucleic acid molecule that hybridizes to a nucleic acid molecule comprising the genomic nucleic acid sequence of Fig. 4 (SEQ ID NO:1), (iii) an isolated nucleic acid molecule that hybridizes to a nucleic acid molecule comprising the cDNA of Fig. 5 (SEQ ID NO:2), (iv) an isolated nucleic acid molecule that hybridizes to a nucleic acid molecule comprising the DNA sequence of Fig. 7A (SEQ ID NO:13), or (v) a vector comprising said nucleic acid molecule and directing expression of the polypeptide encoded by said nucleic acid molecule; wherein said acquired resistance polypeptide confers, on a plant expressing

said polypeptide, resistance to a plant pathogen;

(b) culturing the transformed cell to express the nucleic acid molecule or the vector; and

(c) recovering the acquired resistance polypeptide.

37 - 39 (Cancelled)

40. (Currently Amended) A method of providing an increased level of resistance against a disease caused by a plant pathogen in a transgenic plant, said method comprising the steps of:

(a) producing a transgenic plant cell comprising (i) an isolated nucleic acid molecule encoding an acquired resistance polypeptide comprising an ankyrin repeat, (ii) an isolated nucleic acid molecule that hybridizes to a nucleic acid molecule comprising the genomic nucleic acid sequence of Fig. 4 (SEQ ID NO:1), (iii) an isolated nucleic acid molecule that hybridizes to a nucleic acid molecule comprising the cDNA of Fig. 5 (SEQ ID NO:2), (iv) an isolated nucleic acid molecule that hybridizes to a nucleic acid molecule comprising the DNA sequence of Fig. 7A (SEQ ID NO:13), or (v) a vector comprising said nucleic acid molecule and directing expression of the polypeptide encoded by said nucleic acid molecule; wherein said acquired resistance polypeptide confers, on a plant expressing said polypeptide, resistance to a plant pathogen; and

(b) regenerating a transgenic plant from the plant cell wherein the nucleic acid molecule or the vector is expressed in the transgenic plant and the transgenic plant is thereby provided with an increased level of resistance against a disease caused by a plant pathogen.

41. (Original) The method of claim 40, wherein said plant pathogen is a bacterium, virus, viroid, fungus, nematode, or insect.

42. (Original) The method of claim 40, wherein said plant pathogen is *Phytophthora*, *Peronospora*, or *Pseudomonas*.

43 - 46 (Cancelled)

47. (Previously Presented) The isolated nucleic acid of claim 1, wherein said nucleic acid complements an acquired resistance mutant.

48. (Previously Presented) The isolated nucleic acid of claim 43, wherein said mutant is an *Arabidopsis npr* mutant.

49. (Previously Presented) The method of claim 36, wherein said wherein said nucleic acid complements an acquired resistance mutant.

50. (Currently amended) The method of ~~claim 45~~ claim 49 , wherein said mutant is an *Arabidopsis npr* mutant.

51. (Previously Presented) The method of claim 40, wherein said nucleic acid complements an acquired resistance mutant.

52. (Previously Presented) The method of claim 47, wherein said mutant is an *Arabidopsis npr* mutant.

53. (new) The isolated nucleic acid molecule of claim 1, wherein said isolated nucleic acid molecule encodes an acquired resistance polypeptide including an amino acid sequence that has at least 80% identity to the amino acid sequence of FIG. 5 (SEQ ID

NO: 3).

54. (new) The isolated nucleic acid molecule of claim 1, wherein said isolated nucleic acid molecule encodes an acquired resistance polypeptide including an amino acid sequence that has at least 80% identity to the amino acid sequence of FIG. 7B (SEQ ID NO: 14).